

May 16, 1960

Dr. Lloyd Berkner
Space Science Board
Washington, D.C.

Dear Lloyd:

We had a meeting at Lockheed, Palo Alto, yesterday to review available information on the emission-reflection spectrum of the earth as it would be seen outside the atmosphere. This would be analogous to Sinton's telescopic studies of Mars, and to the planned efforts to detect organic material on the planets by vicinal probes.

I am deeply disturbed to leave that meeting with the impression that the desired information simply does not exist; there remains, of course, the possibility that it is buried somewhere else in the classified literature. Since the satellite-early warning programs depend on the detection of unique spectral features against the normal background of the earth, it is astonishing that this should not have been empirically determined. Some reasonably plausible predictions can, of course, be made, but we would be very sad to find ourselves making new discoveries comparable to the absorption of radar by water.

As far as I could tell, this gap stems from the urgency of the program in its early stages, and the lack of funding for fundamental studies at that time.

Sincerely,

Joshua Lederberg

The indicated action, if warranted, would be I assume to call the matter to Herbert York's attention.

*Berkner's reply
by Secret Letter - returned to Berkner.*